

Work Order ID 55929

February 4, 2010 2:43:39 PM



Page 1

Item ID: D350-636-012

Revision ID:

Item Name: Skidtube RH

Start Date: 2/04/10 Start Qty: 1.00

Required Date: 2/12/10 Req'd Qty: 1.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:



Run Start



Stop



Approvals:

Process Plan:

R/

Date: *10-2-04* Tooling:

Date:

QC:

Date: SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2750

Rev F

100

0.00



DC

DOCUMENT CONTROL

0.00

Document Control

Memo

Photocopy blue file and type labels per PPP D350-636-012 CHG 005

5/10/03/11

HJ for BG 10/03/11

Work Order ID 55929

February 4, 2010 2:43:39 PM



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Required Date: 2/12/10 Req'd Qty: 1.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Run Start



Stop



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110



Skidtubes

Skidtubes

Skidtubes

0.00

0.00

Memo

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 5 (D2750-2 details).Drill using drill Jig DT8150 & DT8863 .

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut as per dwg D2750.

4-Drill pilot holes for blade fitting bolts using DT8983. Open to 0.500"

5- locate DT8329 off of blade fitting bolt holes and drill pilot holes blade fitting.

6-Open up holes for Detail K to 0.375" (4 holes per side) blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open holes for ground handling and detail L to 0.500" (8 holes per side)

7-Drill pilot holes for wearplates as per Dwg D2750 using DT8108. Open to 0.297".

8-Open up holes of Detail J to 0.297" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSI 004.Fill grooves in bend left from bending as per QSI 004
A/R ☐ ☐ Aluminum Rod ☒ M113207 } GC 10/02/08

10-Grind welds flush as per Dwg D2750

10/2/08

Work Order ID 55929

February 4, 2010 2:43:44 PM

Item ID: D350-636-012

Revision ID:

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Start Date: 2/04/10 Start Qty: 1.00

Required Date: 2/12/10 Req'd Qty: 1.00

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Accept

Setup Start

Stop

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Customer:

Run Start

Stop

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

11- scribe batch #.

11/01/218

120



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

Memo

0.00

8/10/09

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

8/10/09

TH

140



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

8/10/09

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February 4, 2010 2:43:44 PM

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Run Start

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC3- Inspect Part Finish

0.00

0.00

DD

10-2-9



QC

Memo

Quality Control

Work Order ID 55929

February 4, 2010 2:43:50 PM



Accept



Setup Start



Stop



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Revision ID:

Item Name: Skidtube RH

Start Date: 2/04/10 Start Qty: 1.00

Required Date: 2/12/10 Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Run Start



Stop



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



Skidtubes

Skidtubes

Skidtubes

0.00

0.00

Memo

1-Open up holes of Detail L and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.

2-Open up holes of Detail K to 0.750" (total of 4 holes per side) as per dwg D2750.

3-Open float holes to .500" (4 per Side)

4-Chamfer holes of Detail K, L, ground handling and float holes per dwg D2750 (welding instructions on sheet 9)

5-Deburr and blow out all chips from inside of tube

6-Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R ☐ ☐ ☐ Sikaflex-291batch: M12429 ☐ ☐ ☐
exp. date: 10/3/12

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 9)

A/R ☐ ☐ ☐ Aluminum Rod

batch: M123207

9-Grind welds flush as per Dwg D2750

10-Spot face ground handling holes section (total of 4 places per side) as per dwg D2750

M 10/2/10

BE 10/2/11

> DP 10-2-10

Work Order ID 55929

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Item ID: D350-636-012

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Start Date: 2/04/10 Start Qty: 1.00

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Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Run Start



Stop



Approvals: Process Plan: Date: Tooling: Date:

QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11- At section AJ-AJ drill out x-bolt spacer to 0.404"

BE 10/02/11

12-Deburr holes

170



QC

Quality Control

QC10- Inspect visual per QS1004- ground welds

0.00

0.00

Memo

8.10.02.17

④

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

Memo

8.10.02.17

④

φ

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Accept



Setup Start



Stop



Cust Item ID:

Customer:

Run Start



Stop



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190



HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

0.00

Memo

0.00

200



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

START TIME: 7:15am
OVEN TEMPERATURE: 320°C
FINISH TIME: 7:45pm

0.00

= 2.11 10/02/18 (X1) ✓

210



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

Inspect for foreign object per QSI 024

0.00

= 2.11 10-03-9 (X1) ✓

Work Order ID 55929

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Item ID: D350-636-012

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube RH

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Cust Item ID:

Required Date: 2/12/10 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

220



HandFinish

Hand Finishing

HandFinishing

Memo

Install inserts as per dwg D2750

0.00

0.00

BR 10-3-9 ① φ

230



HandFinish

Hand Finishing

HandFinishing

Memo

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3"
batch:

3-Install blade fitting D3488-042, wearshoes and ground handling hardware as
per dwg D2750
SIKA FLEX 241
BATCH: M112345
EXP DATE: 10/08

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube
A/R 55-o-ring lube batch: 101223

5-Coat all exposed fasteners with "LPS Procyon"
batch: 104251

0.00

0.00

BR 10-3-9 ① φ



Work Order ID 55929

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Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:



Run Start



Stop



Approvals: Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

240

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Solorio



Quality Control

250

Pick Kit

0.00



Packaging

Memo

0.00

10-3-10

SP

Packaging

260

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Solorio



Quality Control

55929

Page 10



Accept



Setup	Start
-------	-------

Stop



Cust Item ID:

Customer:

Run	Start
-----	-------

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

**Insp.
Stamp**

0.00

Packaging

Packaging

Memo

Package as per PPP D350-636-012

0.00

Rev A

10-3-11 sf

QC21- Final Inspection - Work Order Release

0.00



QC

Quality Control

Memo

0.00

10/03/16 HJ
MF 10-3-1

Picklist Print

February 4, 2010 2:42:54 PM

Page 1

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments:

IPP Rev: I 02.09.25 Rearranged procedure steps KJ
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-225

Purchased

No

220

Each

6,420.000 38.0000



Insert

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

6420

107441 ✓

16

110768 ✓

6404

230

Each

706.0000 34.0000

AN3C5A

Purchased

No



Bolt

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

706

111424

8

111707

69

112314

1

113121

214

113149 ✓

300

113644

114

38. BR 10-3-9

34. BR 10-3-9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February 4, 2010 2:42:54 PM

Work Order ID: 55929



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:I 02.09.25 Rearranged procedure steps KJ
 IPP Rev:J 06-03-29 As per Rev D EC
 IPP Rev:K 06-07.13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

AN3C6A

Purchased

No

230

Each

778.0000 4.0000



BOLT

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

778

111982 ✓

778

230

Each

116.0000 4.0000

AN6C44A

Purchased

No



BOLT

Warehouse

Loc Qty

Loc Code

Location

OFFSHORE

FG

2

103964

2

Main Warehouse

ST

114

110105

4

110155

14

110665

1

111605 ✓

42

111649

50

112720

1

113121

2

H. BR 10-3-9

H. BR 10-3-9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Picklist Print

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Work Order ID: 55929



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 2/04/10

Required Date: 2/12/10

Comments:

IPP Rev: I 02-09-25 Rearranged procedure steps ☐ KJ ☐
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07-13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

131.0000

1.0000



BOLT



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

131

102180

1

106896

1

110105

48

110847 ✓

81

1 BR 10-3-9

AN960C10L

Purchased

No

230

Each

388.0000

38.0000



washer



Warehouse

Loc Qty

Loc Code

Location

OFFSHORE

FG

100

103585

100

Main Warehouse

ST

288

112116

128

112612

160

38. BR 10-3-9

WAS 1149C0332R

113737

February 4, 2010 2:42:54 PM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Picklist Print

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Page 4

Work Order ID: 55929

Parent Item: D350-636-012

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 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

AN960C816L

Purchased

No

230

Each

216.0000

1.0000



WASHER



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

216

104093

2

107520

4

110139

29

110584

100

111424 ✓

81

1 10-3-9

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Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Work Order ID: 55929



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 2/04/10

Required Date: 2/12/10

Comments: IPP Rev: I 02-09-25 Rearranged procedure steps [KJ]
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07-13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By: EC

Start Qty: 1.00

Required Qty: 1.00

D2745

Manufactured No

230

Each

298.0000 8.0000



Bushing

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

36

43754

2

44893

33

45556

1

Main Warehouse

ST023

23

34817

2

36230

8

37303

1

39587

2

40726

2

41114

2

42778

6

Main Warehouse

ST46

239

51537

54

51910

4

52311

181

8 PL 10-3-9.

February 4, 2010 2:42:56 PM

Shop Packet Print

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

D3488-042



Blade Fitting Assembly, RH

Manufactured No 230 Each 13.0000 1.0000



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

13

29043

1

52666 ✓

12

230

Each

121.0000

8.0000

1 BL 10-3-9.

D3492-041



Plug Assembly

Manufactured No

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

121

51584

44

55446 ✓

77

8. BL 10-3-9.

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID: 55929



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Parent Item Name: Skidtube RH

Start Date: 2/04/10

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 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By: EC

Start Qty: 1.00

Required Qty: 1.00

D3492-043

Manufactured No

230

Each

95.0000

8.0000



Plug Assembly

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP

91

54682

91

Main Warehouse

ST

4

52309

4

D3535-25

Manufactured No

230

Each

8.0000

1.0000



Wearshoe

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP

2

51927

2

Main Warehouse

ST

6

52589

6

8 BL10-3-9.

1 BL10-3-9.

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Start Qty: 1.00

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 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

D3536-25

Manufactured No

230

Each

33.0000

1.0000



Gasket

WarehouseLoc QtyLoc CodeLocation

Main Warehouse

FP10

28

51607

2

54479 ✓

26

Main Warehouse

ST

5

45569

1

47011

2

47526

2

Manufactured No

230

Each

90.0000

3.0000

D3537-1



Wearpad

WarehouseLoc QtyLoc CodeLocation

Main Warehouse

FP

2

48288

2

Main Warehouse

FP17

88

51678

1

* 51679 ✓

87

1 BK10-3-9.

3 BK10-3-9.

Shop Packet Print

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 9

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments:

IPP Rev: I 02.09.25 Rearranged procedure steps KJ
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

D3631-1



Washer

Manufactured No 230 Each 394.0000 8.0000



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

394

52693 ✓

94

54388

300

Manufactured No

230

Each

1,720.000 4.0000



8 BK 10-3-9

D3672-1



Phenolic Washer

Manufactured No

230

Each

1,720.000 4.0000



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

1220

39275

19

42329

5

47628 ✓

196

52505

1000

Main Warehouse

ST117

500

51674

500

4. BK 10-3-9

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Page 9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng/ Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 10

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments: IPP Rev: I 02.09.25 ☐ Rearranged procedure steps ☐ KJ ☐
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

D3791-1



Wearplate

Manufactured No 230 Each 5.0000 1.0000

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Main Warehouse

FP 55457.	2	
51610	2	

Main Warehouse

ST	3	
51909	3	

Manufactured No 230 Each 15.0000 1.0000

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Main Warehouse

ST	15	
40551	1	
51597 ✓	14	

1 BL 10-3-9.

1 BL 10-3-9.

D3793-1



Wearshoe

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Page 10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng'/ Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 11

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments:

IPP Rev: I 02.09.25 ☐ Rearranged procedure steps ☐ KJ ☐
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07-13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

D3793-3

Wearshoe

Manufactured No 230 Each 10.0000 1.0000

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

51592 ✓

10

10

230

Each

21.0000

1.0000

D3794-1

Gasket

Manufactured No

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP

51928 ✓

55459

18

6

12

Main Warehouse

ST

46530

47212

3

1

2

1 BL 10-3-9.

1 BL 10-3-9.

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Page 11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng'/ Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 12

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments:

IPP Rev:I 02.09.25 Rearranged procedure steps KJ
 IPP Rev:J 06-03-29 As per Rev D EC
 IPP Rev:K 06-07.13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

D3794-3



Gasket

Manufactured No

230

Each

15.0000

1.0000



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP

12

51598

2

51907 ✓

10

Main Warehouse

ST

3

46531

2

47440

1

Purchased

No

230

Each

976.0000

4.0000



MS21043-6



NUT

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

976

112314 ✓

976

1 BK 10-3-9.

4. BK 10-3-9.

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Shop Packet Print

Page 12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 13

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments: IPP Rev: I 02.09.25 ☐ Rearranged procedure steps ☐ KJ ☐
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

MS21083C8



NUT

Purchased No 230 Each 78.0000 1.0000



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	78
110584	5
111424	2
113149	21
113845	50

NAS1611-010



O-RING

Purchased No 230 Each 330.0000 8.0000



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	330
110715	44
110915	286

1 PR 10-39.

P.T.O.

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W/O: 55929

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-3-9	280	CHANGE O'RING WAS 1611-010 FOR (D7594-3 55546)	BR	10-3-9	8.		<i>[Signature]</i>

Part No: D350-636-012 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 14

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments: IPP Rev: I 02.09.25 ☐ Rearranged procedure steps ☐ KJ ☐
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013



O-RING

Purchased No 230 Each 142.0000 8.0000



Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

100

113743

100

Main Warehouse

ST

42

106513

11

111424

20

111758 ✓

11

AN8C21A



BOLT

Purchased No

250 Each 130.0000 2.0000



8. BK 10-3-9.
10-3-10 SD P

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

130

105160

1

107596

1

107924

2

109092

2

110341

2

110342

2

111605

50

112720

20

113558

50

2

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Page 14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng/ Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 15

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Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments: IPP Rev: I ☐ 02.09.25 ☐ Rearranged procedure steps ☐ KJ ☐
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

AN960C816L

Purchased

No

250

Each

216.0000

2.0000



WASHER



10-3-10 SP

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

216

104093

2

107520

4

110139

29

110584

100

111424

81

 2

D2741

Manufactured

No

250

Each

24.0000

1.0000



Blade, 350 Skidtube



10-3-10 SP

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

24

51931

24

HH

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Picklist Print

Page 16

February 4, 2010 2:43:22 PM

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments: IPP Rev: I 02.09.25 Rearranged procedure steps KJ
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

D3493-1

Manufactured No 250 Each 41.0000 2.0000



Washer



10-3-10 S

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

41

44902

2

47710

39

Manufactured No 250 Each 68.0000 2.0000

D3532-1



Spacer



10-3-10 S

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

68

44904

2

52321

66

Purchased No 250 Each 934.0000 2.0000

D3672-13



Phenolic Washer



2 10-3-10 S

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

934

54363

934

2

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Shop Packet Print

Page 16

Picklist Print

Page 17

February 4, 2010 2:43:27 PM

Work Order ID: 55929

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments: IPP Rev: I 02.09.25 Rearranged procedure steps KJ
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased No 250 Each 78.0000 2.0000



NUT

10-3-10 SP

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	78
110584	5
111424	2
113149	21
113845	50

D2600-3-BENT

Manufactured No

110 Each 17.0000 1.0000



Extrusion Bent

2

Warehouse Loc Qty Loc Code

Location

Main Warehouse

LG	12
50675	2
55462	10

Main Warehouse

ST	5
43495	1
47133	1
52346	3

1 11/10/2/8

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Page 18

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Work Order ID: 55929



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 2/04/10

Required Date: 2/12/10

Comments:

IPP Rev: I 02.09.25 Rearranged procedure steps KJ
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By: EC

Start Qty: 1.00

Required Qty: 1.00

D2744

Manufactured No 110 Each 51.0000 1.0000



Cap



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

51

44892

1

47488

23

51922

27

D2739

Manufactured No 160 Each 5.0000 1.0000



350 I Beam



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

5

47124

1

53900

2

55034

1

55569

1

BE 11/02/09

55986

1 11/10/2110

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Picklist Print

February 4, 2010 2:43:33 PM

Work Order ID: 55929



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 2/04/10

Required Date: 2/12/10

Comments: IPP Rev: I 02.09.25 Rearranged procedure steps [KJ]
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07.13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By: EC

Start Qty: 1.00

Required Qty: 1.00

D2743

Manufactured No 160 Each 227.0000 8.0000



Crossbolt Spacer

Warehouse Loc Qty Loc Code

Location

Main Warehouse

LG 52

50281 50

51913 2

Main Warehouse

ST 175

44891 2

45555 17

48275 1

52310 155

8

BE 10/02/11

D3490-3

Manufactured No 160 Each 69.0000 4.0000



Cross Bolt Spacer

Warehouse Loc Qty Loc Code

Location

Main Warehouse

LG 60

55010 60

Main Warehouse

ST 9

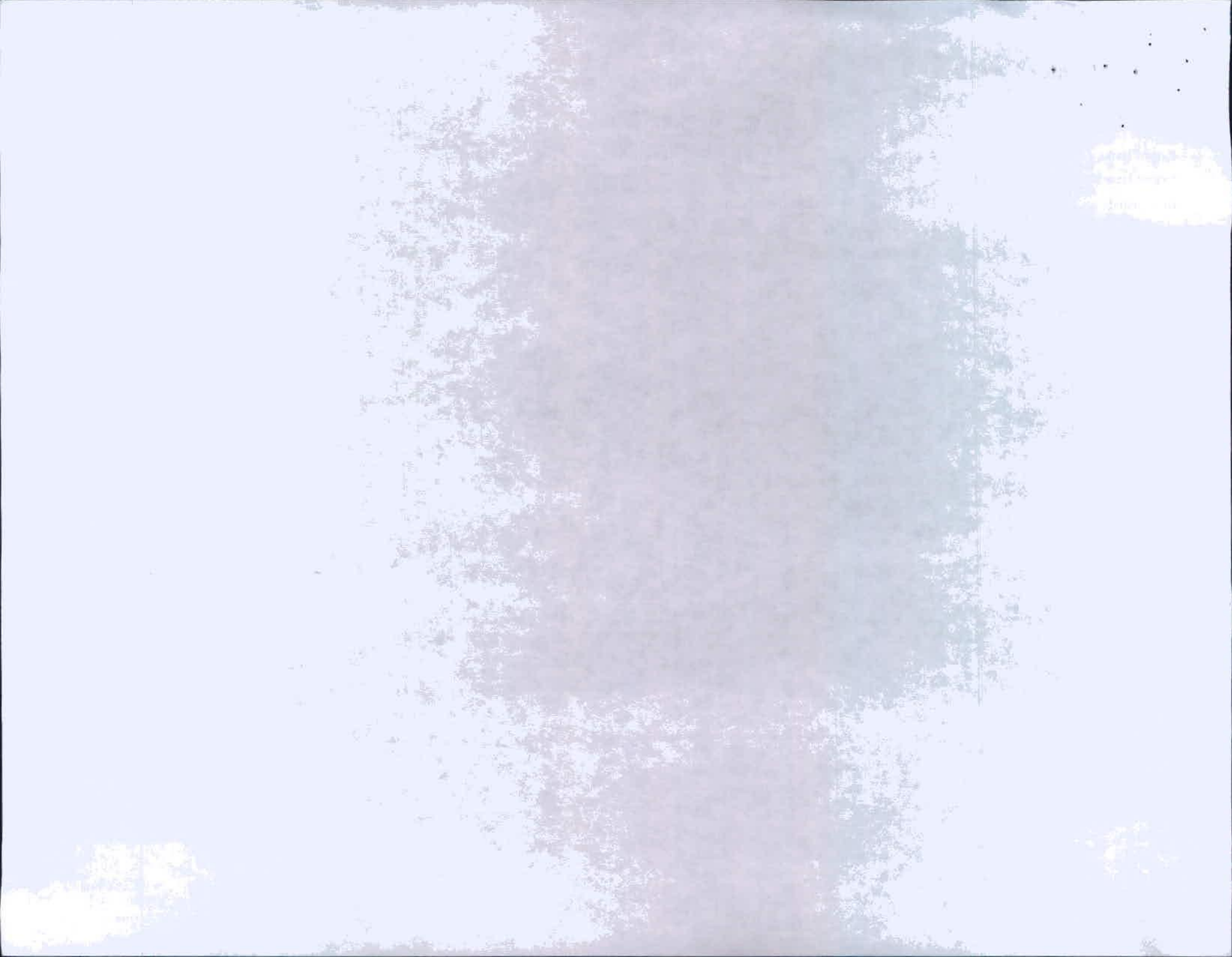
45560 1

48276 4

51930 4

4

BE 10/02/11



2:43:33 PM

Order ID: 55929



Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Start Date: 2/04/10

Required Date: 2/12/10

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev: I 02.09.25 Rearranged procedure steps KJ

IPP Rev: J 06-03-29 As per Rev D EC

IPP Rev: K 06-07.13 As per dsi9343 EC

IPP Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By: EC

D3490-1

Manufactured No

160

Each

52.0000

4.0000



Cross Bolt Spacer

WarehouseLoc QtyLoc CodeLocation

Main Warehouse

ST

52

45338

2

47657

2

48277

9

51932

39

4

BE 10/02/11

Picklist Print
February 4, 2011

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
					INSERT (OR ALS4-1032-225, AKS4-1032-225, AELS-1032-225)
38	38	38	38	AN3C5A	BOLT
34	34	34	34	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
4	4	4	4	AN8C35A	BOLT
1	1	1	1	AN960C10L	WASHER
38	38	38	38	AN960C816L	WASHER
1	1	1	1	MS21043-5	NUT
4	4	4	4	MS21083C8	NUT
1	1	1	1	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH: ACID ETCH, ALONDE ASSEMBLY PER DART OSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART OSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
- 3) UNITS: INCHES UNLESS OTHERWISE NOTED
- 4) BREAK SHARP EDGES: N/A
- 5) IDENTIFICATION: N/A
- 6) WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- 7) WELD PER DART OSI 004
- 8) INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF
- 11) POWDER COATING WITH MEK DEGREASER
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 13) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 53929
AS 10-2-04

RELEASED
66-07-22

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3535-13/35 (ZN C8-1); D3794-1/3 REPLACES D3536-13/35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/FT SADDLE REMOVED; ADD D3791-1 (ZN C8-1); (8 PL) WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS, ADD D3631-1; REMOVE QTY (38) NAS1515H3L, REMOVE QTY (10) NAS1515H3L, REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21053C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4, INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	PA		
DRAWN	PA		
CHECKED	PA		
MFG APPR.	PA		
APPROVED	PA		
DE APPR.	PA		
DATE	08.07.16		

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

DRAWING NO. D2750
TITLE 350 SKIDTUBE ASSEMBLY
REV. F
SHEET 1 OF 11
SCALE NTS
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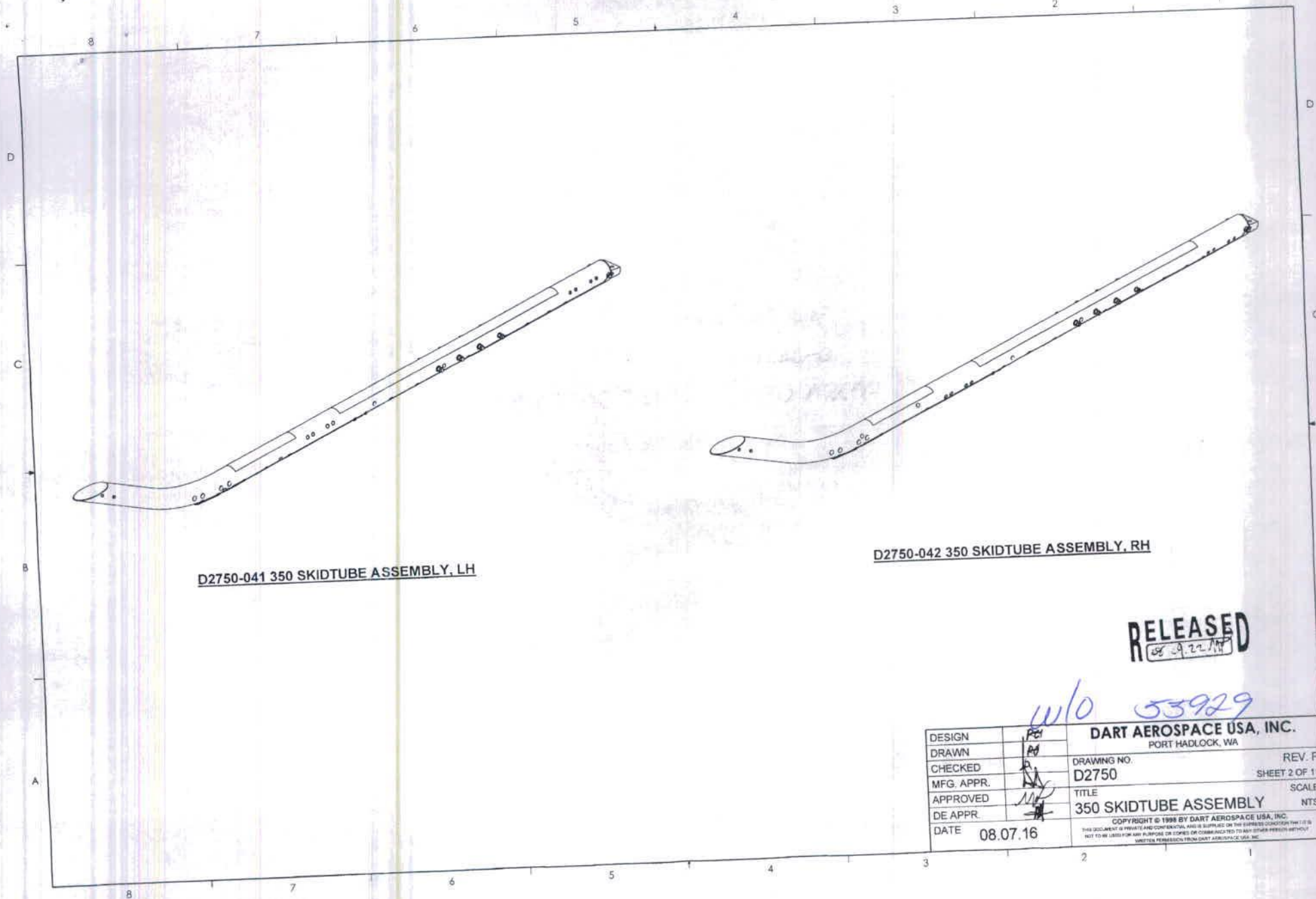
W/O:		WORK ORDER CHANGES				
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	App Chief Prod

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2750-041 350 SKIDTUBE ASSEMBLY, LH

D2750-042 350 SKIDTUBE ASSEMBLY, RH

RELEASED
08.07.16

w/o 53929

DESIGN	PC	DART AEROSPACE USA, INC.	
DRAWN	AM	PORT HADLOCK, WA	
CHECKED	AM	DRAWING NO. D2750	REV. F
MFG. APPR.	AM	TITLE	SCALE
APPROVED	AM	350 SKIDTUBE ASSEMBLY	NTS
DE APPR.	AM	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	
DATE	08.07.16		

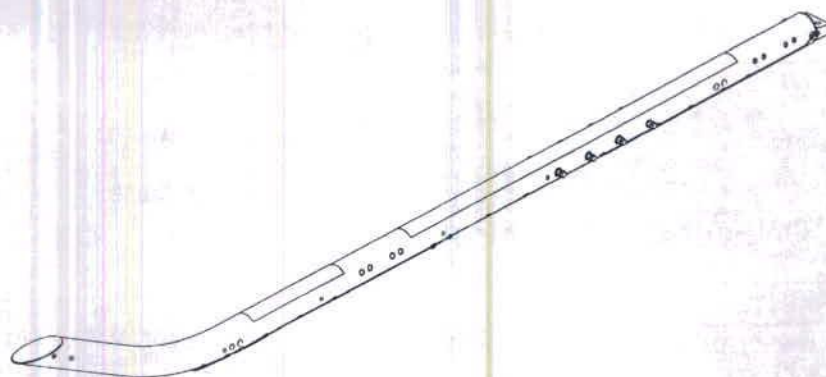
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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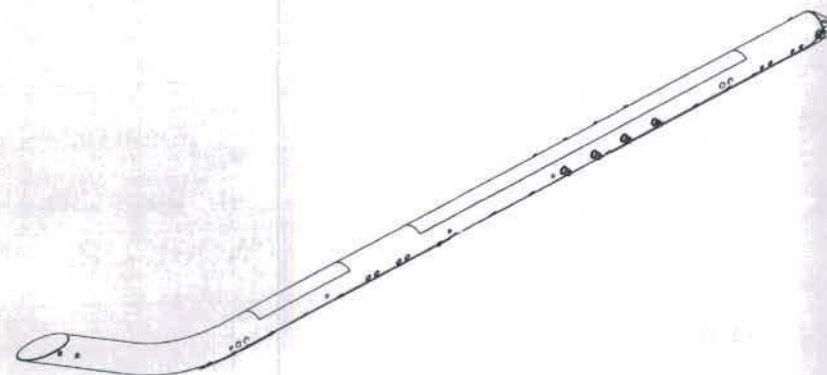
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2750-043 350 SKIDTUBE ASSEMBLY, LH



D2750-044 350 SKIDTUBE ASSEMBLY, RH

RELEASED
08-09-22/100

w/o 55929

DESIGN	PD	DART AEROSPACE USA, INC.	
DRAWN	PD	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 3 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

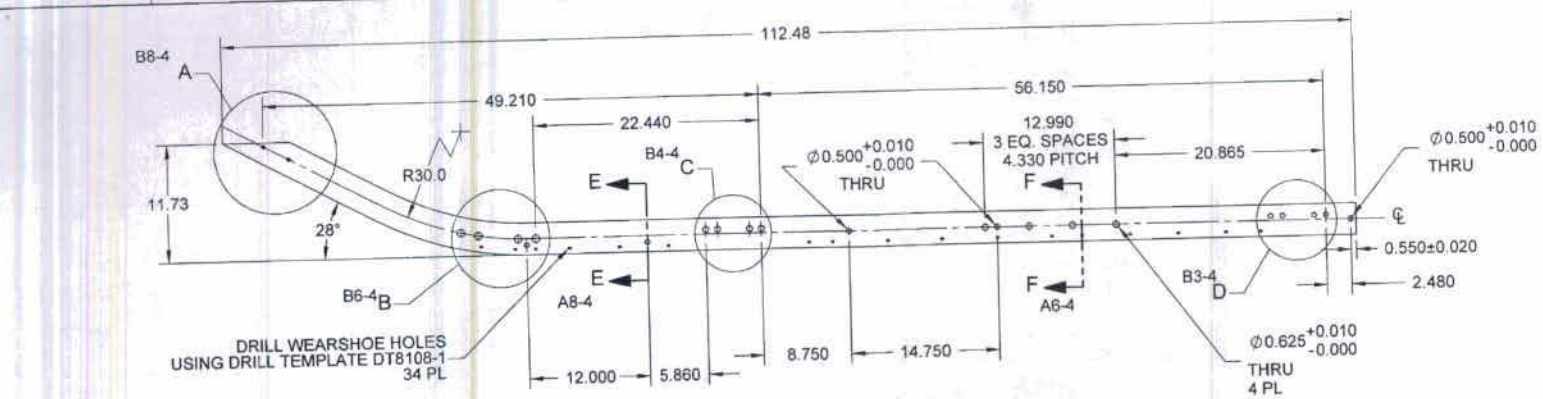
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

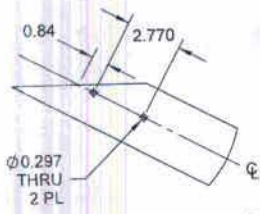
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

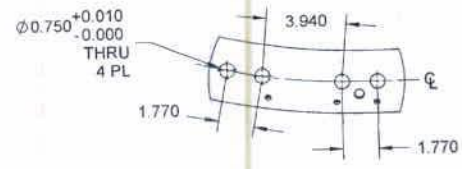
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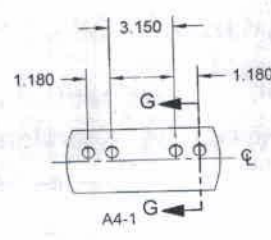
D2750-1 LH SKIDTUBE



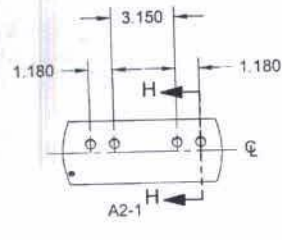
DETAIL A
SCALE 2X



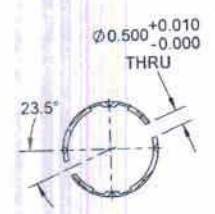
DETAIL B
SCALE 2X



DETAIL C
SCALE 2X



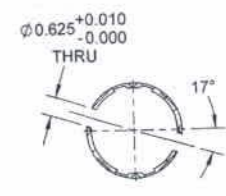
DETAIL D
SCALE 2X



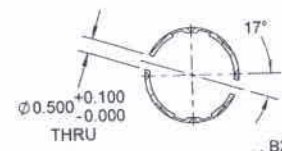
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

RELEASED

w/0 55929

DESIGN	D2750	DART AEROSPACE USA, INC.	REV. F
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	SHEET 4 OF 11
MFG. APPR.		TITLE	SCALE
APPROVED		350 SKIDTUBE ASSEMBLY	NTS
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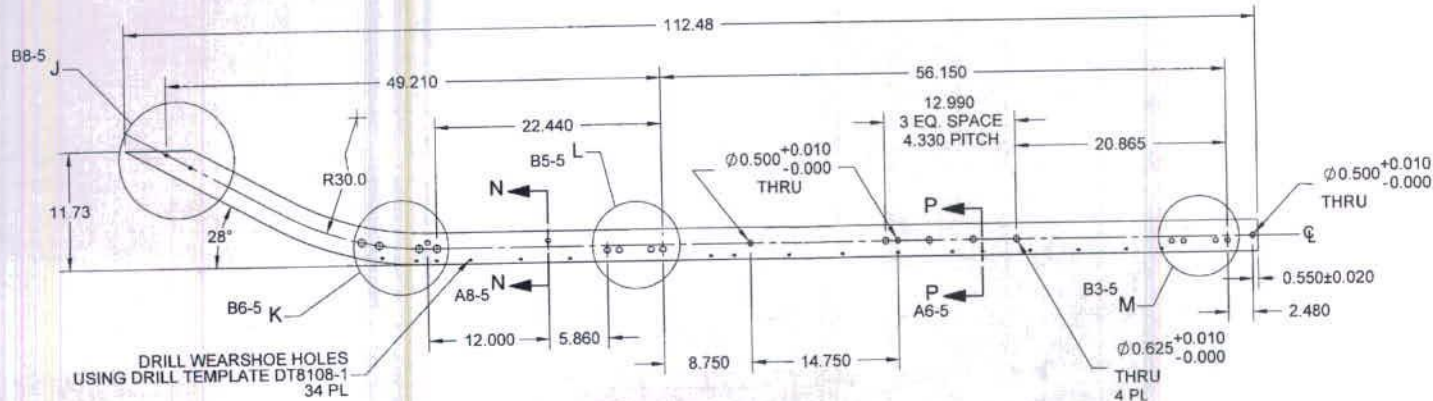
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

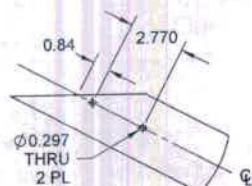
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

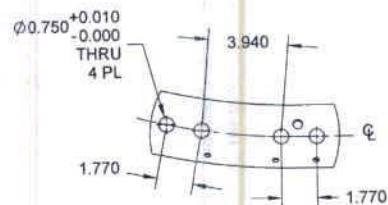
NOTE: Date & initial all entries



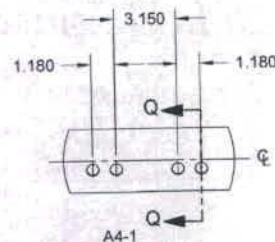
D2750-2 RH SKIDTUBE



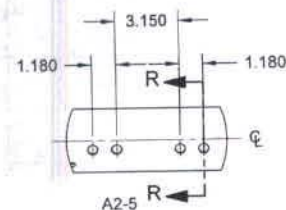
DETAIL J
SCALE 2X



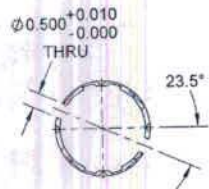
DETAIL K
SCALE 2X



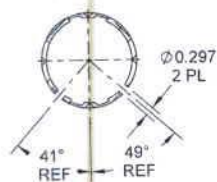
DETAIL L
SCALE 2X



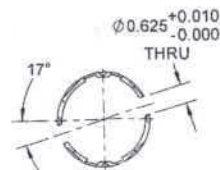
DETAIL M
SCALE 2X



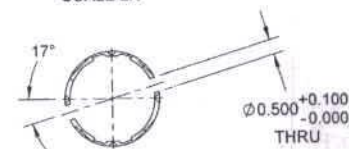
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

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w/050929

DESIGN	
DRAWN	
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	08.07.16

DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWING NO. D2750	REV F SHEET 5 OF 11
TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
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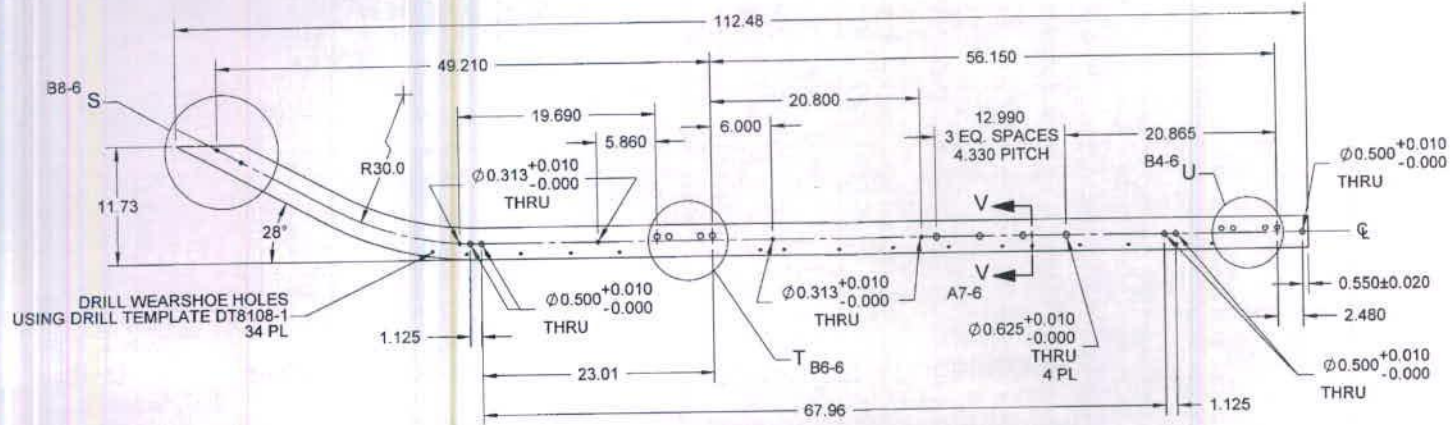
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

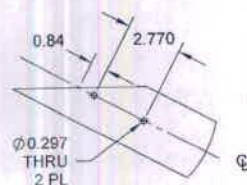
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

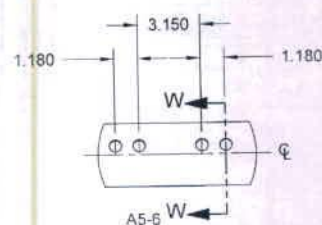
NOTE: Date & initial all entries



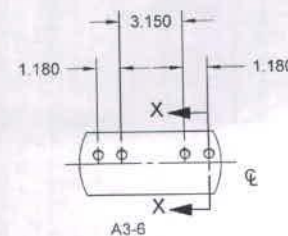
D2750-3 LH SKIDTUBE



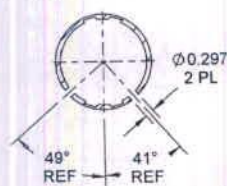
DETAIL S
D8-6
SCALE 2X



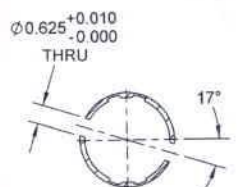
DETAIL T
C5-6
SCALE 2X



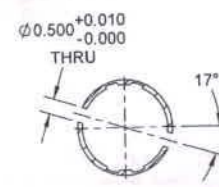
DETAIL U
D3-6
SCALE 2X



SECTION V-V
C4-6
SCALE 3X, 17 PL



SECTION W-W
B6-6
SCALE 3X, 4 PL



SECTION X-X
B4-6
SCALE 3X, 4 PL

RELEASED
08-27-16

W/O 55929

DESIGN		DART AEROSPACE USA, INC.	REV. F
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO. D2750	SHEET 6 OF 11
MFG. APPR.		TITLE	SCALE
APPROVED		350 SKIDTUBE ASSEMBLY	NTS
DE APPR.		COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.	
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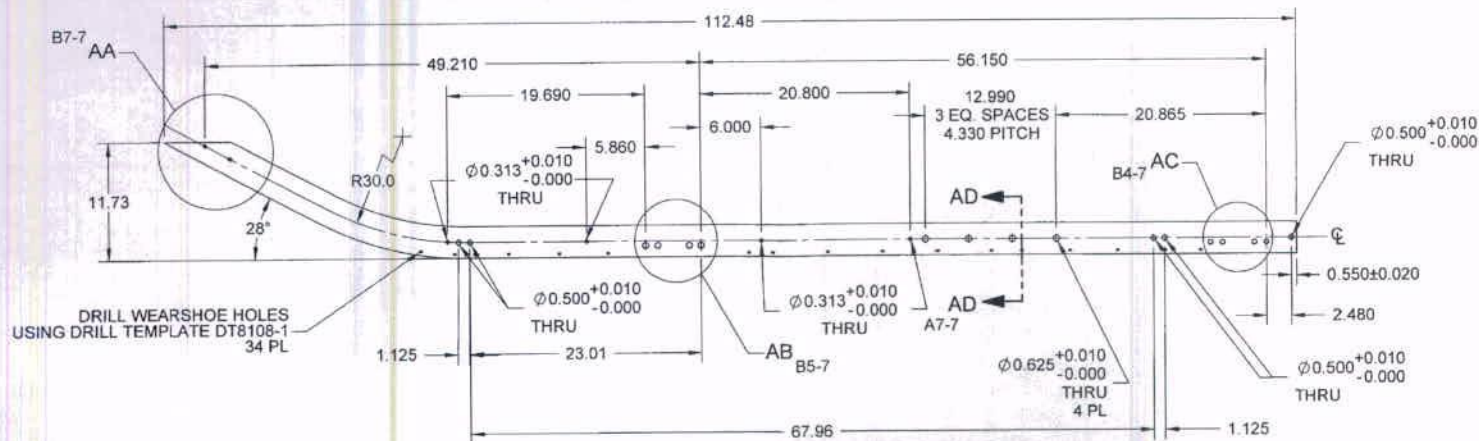
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

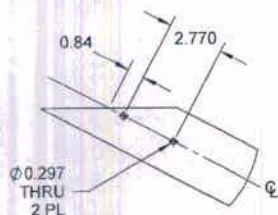
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

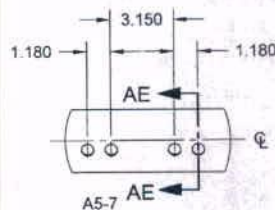
NOTE: Date & initial all entries



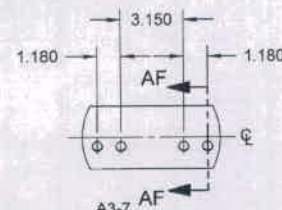
D2750-4 RH SKIDTUBE



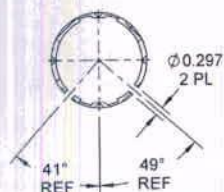
DETAIL AA
SCALE 2X



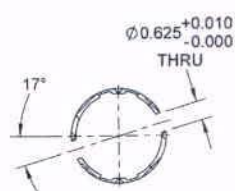
DETAIL AB
SCALE 2X



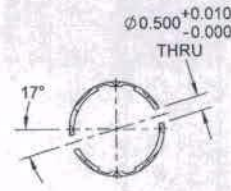
DETAIL AC
SCALE 2X



SECTION AD-AD
SCALE 3X, 17 PL



SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

RELEASED
08-09-2010

w/o 55929

DESIGN	D2750	DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO. D2750	REV. F
MFG. APPR.			SHEET 7 OF 11
APPROVED		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
DE APPR.			
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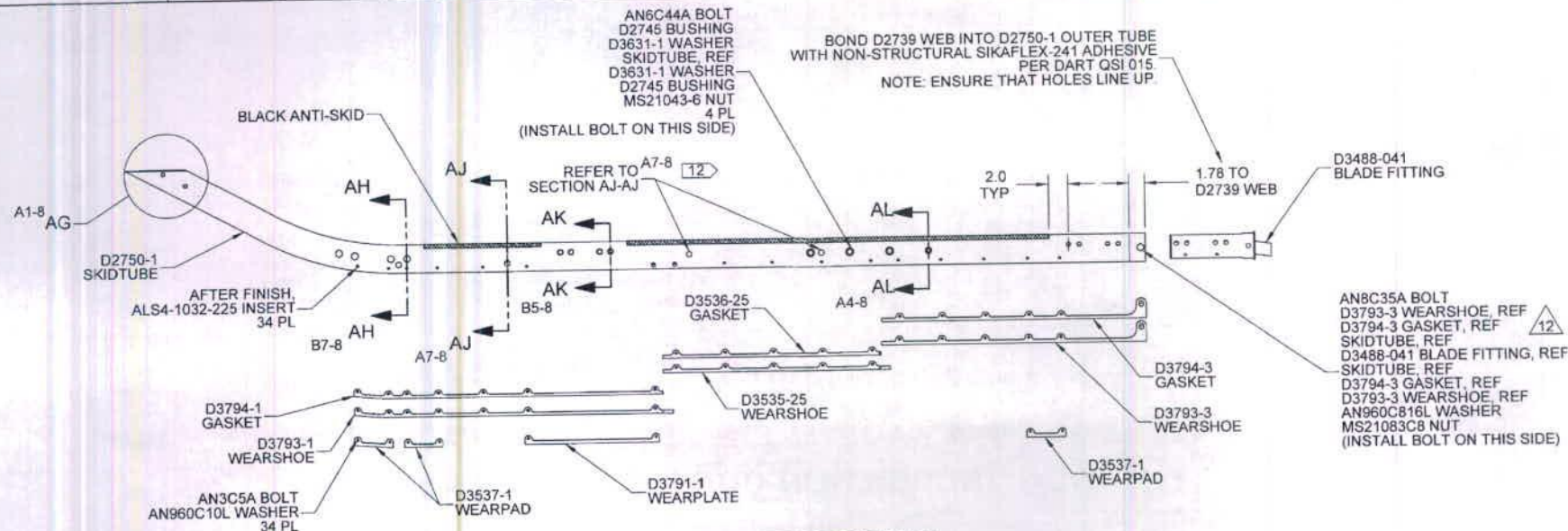
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

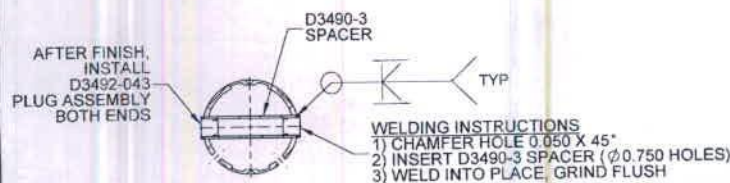
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

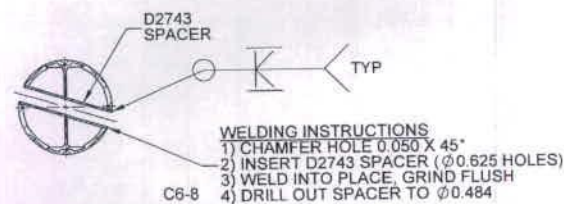
NOTE: Date & initial all entries



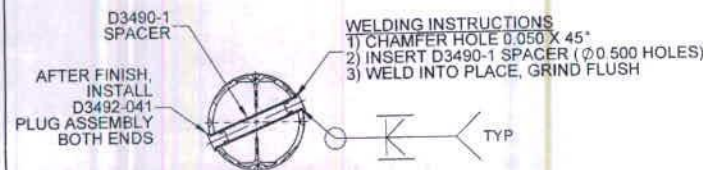
D2750-041 350 SKIDTUBE ASSEMBLY, LH



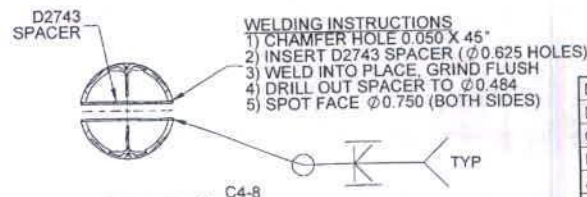
SECTION AH-AH
SCALE 3X, 4 PL



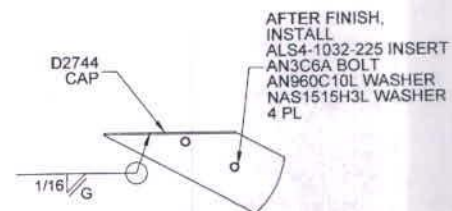
SECTION AK-AK
SCALE 3X, 4 PL



SECTION AJ-AJ
SCALE 3X, 4 PL



SECTION AL-AL
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)



DETAIL AG
SCALE 2X

RELEASED
D8-8
08.07.16

DESIGN	PA	DART AEROSPACE USA, INC.	REV. F
DRAWN	PA	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	SHEET 8 OF 11
MFG. APPR.		D2750	SCALE
APPROVED		TITLE	350 SKIDTUBE ASSEMBLY
DE APPR.			NTS
DATE	08.07.16		

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

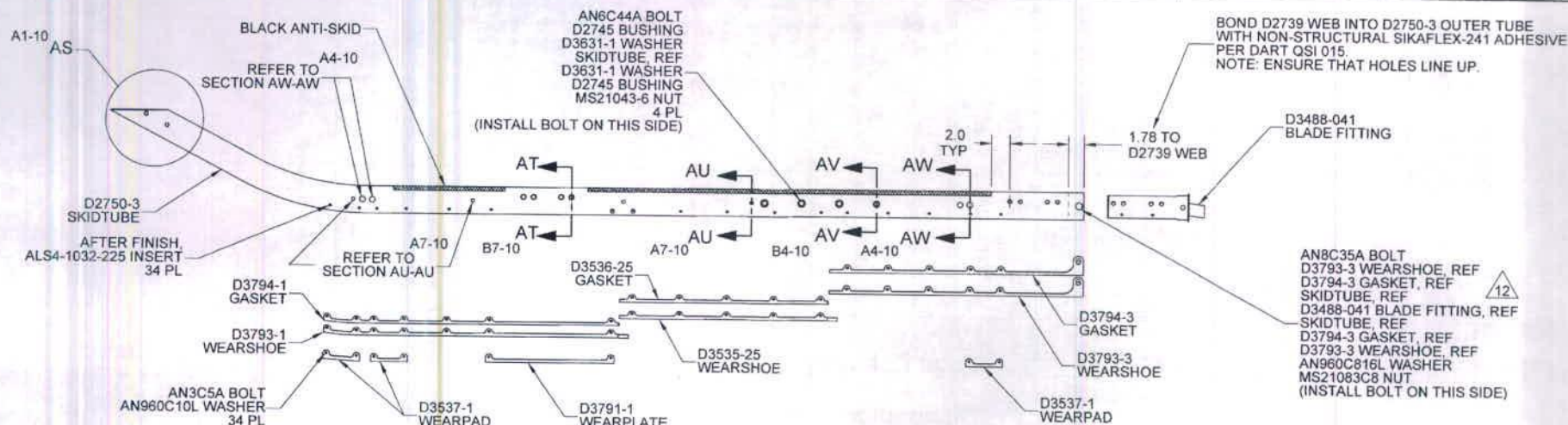
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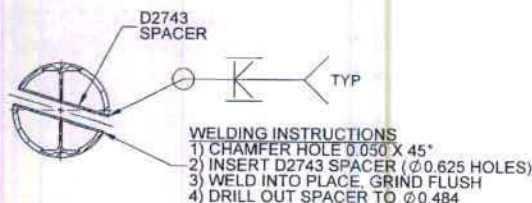
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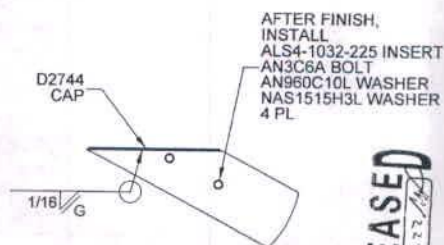
D2750-043 350 SKIDTUBE ASSEMBLY, LH



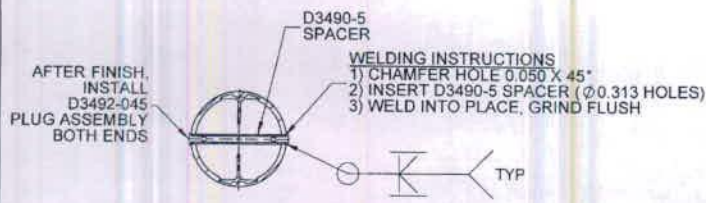
SECTION AT-AT
SCALE 3X, 4 PL



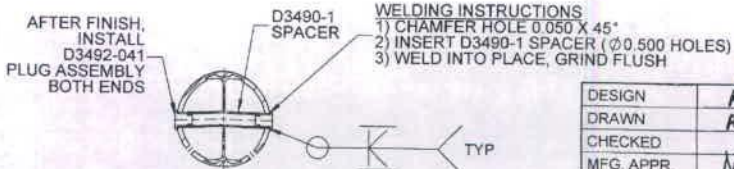
SECTION AV-AV
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)



DETAIL AS
SCALE 2X



SECTION AU-AU
SCALE 3X, 4 PL



SECTION AW-AW
SCALE 3X, 4 PL

DESIGN	100	DART AEROSPACE USA, INC.	
DRAWN	100	PORT HADLOCK, WA	
CHECKED	100	DRAWING NO.	REV. F
MFG. APPR.	100	D2750	SHEET 10 OF 11
APPROVED	100	TITLE	SCALE
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 222

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 54956
Part number: D350-636-012
Description: 350 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat J. Date of Test Coupon 10.01.11
Welder Barclay Elliott Date of Test Coupon 10-01-11

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

